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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,066	05/31/2001	Jyotirmoy Paul	50277-1557	2304

29989 7590 12/14/2004

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EXAMINER

SIDDIQI, MOHAMMAD A

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,066

Applicant(s)

PAUL ET AL.

Examiner

Mohammad A Siddiqi

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/01/04, 9/27/04, 7</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-55 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 26-40, 46 and 49-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al. (6,473,609) (hereinafter Schwartz) in view of Kelly et al. (6,463,565) (hereinafter Kelly).

4. As per claims 1 and 54, Schwartz discloses a method and computer readable medium interacting with a client process on a mobile device connected to a network over a wireless link, the method comprising the steps of:

Receiving (906, fig 9A), in a first method of an application executing (message processor, col 8, lines 46-52) on a first platform connected to the

network (col 5, lines 11-15), first data (col 13, lines 26-58) from a link server (control engine acting like state machine, 609, fig 6) in response to a message from the client process (col 13, lines 25-36); and

returning second data (col 14, lines 10-18) for the client process (602, fig 6, mobile device, col 13, lines 25-38) to the link server (control engine acting like state machine, 609, fig 6) in response to said receiving the first data (col 10, lines 19-25);

wherein the link server (control engine acting like state machine, 609, fig 6) executes on a second platform connected to the network (col 5, lines 47-53),

the second platform is distinct from the mobile device (col 5, lines 47-61),

the first platform is distinct from the mobile device (col 5, lines 47-61), and

the link server (control engine acting like state machine, 609, fig 6) information about a plurality of messages from the client process (col 8, lines 46-62).

Schwartz does not explicitly disclose state machine. However, state machine is very well known in the art. In general, a state machine is any device that stores the status of something at a given time and can operate on input to change the status and/or cause an action or output to take place

for any given change. The operating system is itself a state and each application that runs begins with some initial state that may change as it begins to handle input. Kelly, for example, discloses state machine (fig 1, col 1, lines 34-42). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Schwartz and Kelly. The motivation would have been developing state machine using object oriented programming techniques.

5. As per claim 26, the claim is rejected for the same reasons as claim 1, above.

6. As per claims 2 and 27, Schwartz discloses the second platform is the first platform (col 5, lines 10-15 and lines 47-50).

7. As per claims 3 and 29, claims are rejected for same reasons as claim 1, above. In addition, Schwartz discloses wherein the second data indicates an item of information based on the information managed by the link server (col 14, lines 10-58).

8. As per claims 4 and 30, an object is a data structure having a name, an attribute and an attribute value (col 13, lines 25-58); and

the second data indicates a page object comprising one or more particular attribute values that are field objects describing graphical elements for display on the mobile device by the client process (screen, col 13, lines 25-58).

9. As per claims 5 and 31, Schwartz discloses the link server manages the information by storing third data describing the one or more field objects in association with fourth data describing the page object (display screen, col 13, lines 25-58).

10. As per claims 6 and 38, Schwartz discloses at least one field object of the one or more field objects indicated by the second data is based on fifth data from the information managed by the link server, the fifth data describing one or more previous field objects comprising a previous page object (display screen, col 13, lines 39-63).

11. As per claim 7, the claim is rejected for the same reasons as claim 1, above. In addition, Schwartz discloses the first data from the link server includes data indicating a unique reference to a previous field object of the one or more previous field objects described by the fifth data in the

information managed by the link server (13, lines 39-67 and col 14, lines 1-4).

12. As per claim 8, Schwartz discloses an object may have behavior represented by a second method; and the field object comprises the second method for generating an extensible markup language (XML) document that describes a graphical element for display on the mobile device by the client process (col 8, lines 62-67).

13. As per claims 9 and 40, Schwartz discloses an object may have behavior represented by a second method; and the field object includes the second method for responding to input from a user of the mobile device, the input associated with a graphical element for display on the mobile device by the client process, the graphical element based on the field object (col 13, lines 39-67 and col 14, lines 1-4).

14. As per claim 28, Schwartz discloses, the step of managing the information about the plurality of requests comprising the step of storing third data based at least in part on the second data (menu, col 13, lines 39-67).

15. As per claim 32, Schwartz discloses the third data specifying the one or more field *objects* is stored with an hierarchical child relationship to the fourth data specifying the page object (scrolling display screen, col 13, lines 39-56 and col 14, lines 1-4).

16. As per claim 33, Schwartz discloses the step of managing the information further comprising generating a unique reference for each field object of the one or more field objects, the unique reference unique among all field objects stored during the step of managing the information about the plurality of requests (menu item, col 13, lines 39-67 and col 14, lines 1-4).

17. As per claim 34, Schwartz discloses third data further comprising storing the third data in a database with an index mapping the unique reference to a location in the database of data specifying each field object (col 13, lines 26-39 and col 14, lines 1-4).

18. As per claim 35, Schwartz discloses the step of generating the unique reference for each field object comprising appending a field name of each field object to a page name of the page object, wherein the field name is

unique among the one or more field objects of the page object (display screen based on menu items, col 13, lines 39-67 and col 14, lines 1-4).

19. As per claim 36, Schwartz discloses the step of generating the unique reference for each field object further comprising appending an application name of the application to the field name and the page name (another card, col 14, lines 1-10).

20. As per claim 37, the claim is rejected for the same reasons as claim 1, above. In addition, Schwartz discloses the step of generating the unique reference for each field object further comprising appending a session name of a communication session between the link server and the client process to the field name and the page name (col 11, lines 15-27 and col 14, lines 10-22).

21. As per claim 39, the claim is rejected for the same reasons as claim 8, above.

22. As per claim 46, Schwartz discloses the method further comprises sending a second response for the client process based on a second page object before said step of receiving the first request (col 13, lines 26-38);

the first request includes data indicating a second attribute value for a second field object for the second page object (col 26, lines 26-44); and the step of managing the information about the plurality of requests comprises the step of storing third data indicating the second attribute value for the second field object (menu items, col 13, lines 26-63).

23. As per claim 49, Schwartz discloses the method further comprises determining whether the second data indicates a redirect to a different resource on the network; and if it is determined that the second data Indicates the redirect, then sending a redirect request to the different resource based on the second data, and receiving a redirect response from the different resource; and the first response is based on the redirect response (URL, col 13, lines 26-63 and col 14, lines 1-9).

24. As per claim 50, Schwartz discloses determining whether the second data indicates termination of the application (downward arrow key, col 13, lines 39-63); and if it is determined that the second data indicates termination, then the first response includes a menu of applications to select for execution (user must make choice, col 13, lines 39-63).

25. As per claim 51, Schwartz discloses an object is a data structure having a name, an attribute, an attribute value and behavior represented by a second method (col 8, lines 62-67 and col 14, lines -16); the information about the plurality of requests specifies a page object comprising one or more particular attribute values that are field objects describing graphical elements for display on the mobile device by the client process; the page object is associated with a previous request received before the first request; the first request indicates a particular field object of the page object; and the first method invoked is the second method of the particular field object (col 13, lines 26-63).

26. As per claim 52, Schwartz discloses if the second method of the particular field object indicates a constructor method for a second page object then the second data received specifies the second page object (col 13, lines 55-58).

27. As per claim 53, Schwartz discloses an object is a data structure having a name, an attribute, an attribute value and behavior represented by a second method ("OK" Button, col 13, lines 15-21);

the first data comprises an event object having; a user action attribute and a session attribute ("OK" Button, col 13, lines 15-21);

a value of the session attribute indicates a particular data structure for the information about the plurality of requests (col 12, lines 31-67); and

a value of the user action attribute indicates a key pressed by a user of the mobile device ("OK" Button, col 13, lines 15-21 and col 12, lines 31-67).

28. As per claim 55, the claim is rejected for the same reasons as claim 1, above. In addition, Schwartz discloses wherein the one or more processors are not on the mobile device (link server function as a bridge so there is no process required, col 5, lines 48-51).

29. Claims 10-25, 41-45, 47 and 48, are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al. (6,473,609) (hereinafter Schwartz) in view of Kelly et al. (6,463,565) (hereinafter Kelly) in further view of Apte et al. (6,269,373) (hereinafter Apte).

30. As per claims 10 and 41, Schwartz and Kelly fails to disclose an object may have behavior represented by a second method; and

a field object of the one or more field objects inherits the second method from a bean class having common methods for storing and retrieving attributes and attribute values of instances of the class. However, Java bean, method, attribute, field behavior, class, instance in object

oriented programming are well known in the art. However, Apte discloses an object may have behavior represented by a second method (col 6, lines 1-9); and

a field object (col 2, lines 48-51) of the one or more field objects inherits (reusable, col 1, lines 29- 33) the second method from a bean class having common methods for storing and retrieving attributes and attribute values of instances of the class (col 1, lines 29-41 and col 7, lines 7-17). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Schwartz and Kelly with Apte. The motivation would have been to develop a scalable, secure, and multi-platform business application using JavaBeans component architecture.

31. As per claims 11 and 42, claims are rejected for the same reasons as claim 10, above. In addition, Apte discloses an object may have behavior represented by a second method; and a field object of the one or more field objects inherits the second method from a JavaBeans class having standard methods for storing and retrieving attributes and attribute values of instances of the class (getters and setters are standard methods of storing and retrieving methods, col 6, lines 10-23).

32. As per claims 12 and 43, claims are rejected for the same reasons as claim 10, In addition, Apte discloses an object may have behavior represented by a second method (manipulation data elements, col 6, lines 1-9); and

the page object inherits the second method from a bean class having common methods for storing and retrieving attributes and attribute values of instances of the class (getters and setters are standard methods of storing and retrieving methods, col 6, lines 1-23).

33. As per claims 13 and 44, claims are rejected for the same reasons as claim 10, In addition, Apte discloses an object may have behavior represented by a second method; and

the page object inherits the second method from a JavaBeans class having standard methods for storing and retrieving attributes and attribute values of instances of the class (col 6, lines 1-23).

34. As per claims 14 and 45, claims are rejected for the same reasons as claims 1 and 10, In addition, Apte discloses the link server manages the information by invoking the common methods of the bean class for storing and retrieving attributes and attribute values of the field object (getters and

setters are standard methods of storing and retrieving methods, col 6, lines 1-23).

35. As per claims 15, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses a prompt attribute (visual component, col 7, lines 25-30);

a text value attribute (Visual component, col 7, lines 25-30); and

a second method for responding to input from a user of the mobile

device, the input associated with a graphical element for display

on the mobile device by the client process, the graphical element

based on the text field bean (col 7, lines 7-29).

36. As per claim 16, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses a prompt attribute and a text value attribute, a list of selectable values attribute, a statement attribute for holding a statement that causes a processor to generate the list of selectable values, a number of list items attribute; and a second method for responding to input from a user of the mobile device, the input associated with a graphical element for display on the mobile device by the client process, the graphical element based on the list-of-values bean (col 7, lines 7-30).

37. As per claim 17, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses a prompt attribute; a list of values attribute; a number of list items attribute; and a second method for responding to input from a user of the mobile device, the input associated with a graphical element four display on the mobile device by the client process, the graphical element based on the list bean (GUI, col 7, lines 7-30).

38. As per claim 18, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses a prompt attribute; a number of lists attribute; a numbers of list items attribute; a list of values attribute; and a second method for responding to input from a user of the mobile device, the input associated with a graphical element for display on the mobile device by the client process, the graphical element based on the multi-list bean (GUI and visual elements, col 7, lines 7-30).

39. As per claim 19, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses a prompt attribute; a checked attribute; and a second method for responding to input from a user of the mobile device, the input associated with a graphical element for display on the mobile device by the client process, the graphical element based on the check-box bean (col 7, lines 7-30 and col 6, lines 1-9).

40. As per claim 20, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses a prompt attribute; a group name attribute; a checked attribute; and a second method for responding to input from a user of the mobile device, the input associated with a graphical element for display on the mobile device by the client process, the graphical element based on the radio-button bean (col 7, lines 7-30 and col 6, lines 1-9).

41. As per claim 21, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses a prompt attribute; and a second method for responding to input from a user of the mobile device, the input associated with a graphical element for display on the mobile device by the client process, the graphical element based on the button bean (col 7, lines 7-30 and col 6, lines 1-9).

42. As per claim 22, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses the field object inherits from a header bean having a text value attribute (features of GUI and visual elements and supported by java, col 7, lines 7-30).

43. As per claim 23, the claim is rejected for the same reasons as claim 10, In addition, Apte discloses the field object inherits from a separator bean

having a character value attribute (features of GUI and visual elements and supported by java, col 7, lines 7-30).

44. As per claims 24 and 47 the claims are rejected for the same reasons as claims 10 and 5, In addition, Apte discloses the first method of the application executing is a constructor method for the page object (features of GUI and visual elements and supported by java, col 7, lines 7-30).

45. As per claims 25 and 48, the claims are rejected for the same reasons as claims 10 and 5, In addition, Apte discloses wherein the application comprises a plurality of constructor methods for a plurality of corresponding page objects including the page object (features of GUI and visual elements and supported by java, col 7, lines 7-30).

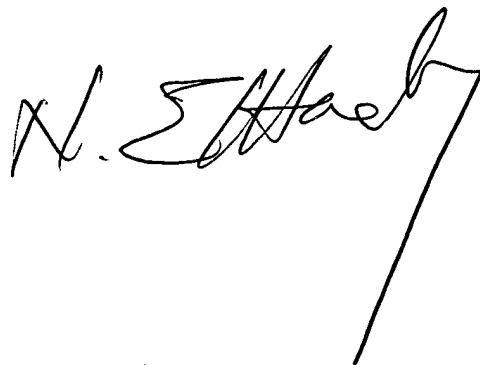
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A Siddiqi whose telephone number is (571) 272-3976. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS

A handwritten signature in black ink, appearing to read "N. S. Hach", with a long, straight vertical line extending downwards from the end of the signature.